



SWARC NEWS

Notes from K7RLH

Welcome to the October 2021 newsletter. I will continue to send out emails with current news rather than only touching base once a month via this document.

I hope you all enjoyed the presentation that I gave on the use of hotspots for radio contacts worldwide over the Internet. This is very useful to Technicians who have very limited HF privileges otherwise.

On Saturday, the 2nd, we held our third testing session at the American Legion. I spoke with our Laurel Regional Coordinator afterward and our exam paperwork was deemed 'perfect' due to efforts of all present. We added two new Technicians to the ham community and upgraded three to General Class!

I continue to encourage you to renew your club membership if you have not already done so. In addition, if you are an ARRL member, I thank you. If not, I encourage you to join as our club is required to maintain 51% ARRL membership to be an affiliated club and there's lots of useful info on their website that has 'members only' access. ARRL is our voice to the FCC and other government agencies regarding protection of frequency spectrums that we hams like to use.

Look for other info in the body of the newsletter.
SWARC de K7RLH

Notes from KB4NC

Nothing to add at this time; stay tuned for program updates

73's,
Manny KB4NC

SWARC 6 October 2021 Meeting Minutes

The meeting was called to order at 7:00 pm by President Richard Hall, K7RLH. As a reminder we are now holding our meetings at 7pm on the first Wednesday of every month in Building 2 on the Legion complex. Richard led us in the Pledge of Allegiance.

We had fair attendance with 10 in person attendees present. A Zoom option was not available for this meeting. Attendees included:

Richard Hall (K7RLH), Bill Blomgren (KK4QDZ), Andy McDaniel (KN4JJU), Al Crawford (WA4TCJ), Steve Mowels (KA0GMY), Mike Gaither (K4MWG), Gary Plante (KO4LQX), Christy Fernandini (KJ4AEO), Federico Lluberes (KK4HAQ), and Steve Rhudy (KY4SLR).

Financial Report:

Christy provided a financial report to the members noting that the club has \$2,602.70 in the bank as of October 6th. Raffle ticket sales remain strong and to sweeten the pot even further Steve Rhudy (KY4SLR) has generously donated a new NanoVNA antenna analyzer to add to the raffle bounty. Thank you Steve! The NanoVNA antenna analyzer adds to the current raffle items which include a Yaesu FTM 7250D 2m/440 radio donated by Gator and the still wrapped in plastic 2021 ARRL Handbook donated by Brian. If you need more raffle tickets to sell, or have any unsold tickets you would like to turn back in please see Richard or Steve Mowels. If you need to renew your club membership or are interested in joining for the first time please visit our website at:

<http://www.southwakearc.com/membership>. A full annual membership is \$30, an associate membership is \$20, additional family members can be added on to your membership for only \$5. Your support is greatly appreciated!

Attendees discussed the intent of SWARC's prorated dues policy and whether the club bylaws need to be updated to better reflect the original intent of the policy. Generally speaking, the intent of the prorated dues policy is to encourage new members to join the club at a reduced rate if they applied for membership at various times within the fiscal year which runs from June to July of the following year. Former members who have been away from the club for a period of time (say a few years) might also benefit from a prorated membership fee. The expectation is that members renewing from one year to the next will pay the full annual membership rate regardless of the month their payment is made.

Although there was not a quorum present at the meeting, based on historical precedence the club plans to donate \$10 per member to Danny Hampton to support maintenance of PCRN repeaters. Based on the current membership

roster the planned donation to Danny would total to \$820. At a future meeting with a quorum present the club may consider increasing this donation.

New Business:

On a personal note, due to health and other reasons our friend Kenny Southern (KJ4CVK) is backing away from ham radio for a period. If you are interested in sending Kenny a card to help brighten his day his mailing address is: 475 Long Leaf Dr. Lillington, NC 27546. Kenny was our number one net control volunteer, so the club is in search for volunteers to take the Wednesday and Thursday nets. If you are interested in volunteering, either full or part time, please contact Richard or any of the club officers.

Also, Gary Plante (KO4LQX), our Membership Director, reports that his third treatment for throat cancer has gone well and the tumor has shrunk. No operation is planned at this point. We're all rooting for Gary and a successful outcome!

Steve Mowels (KA0GMY) announced that nominations for Ham of the Year are being accepted. Three hams have been nominated so far and it's a close race. If you have a nomination, please see Steve.

As a reminder to ARRL members voting starts soon for the 2021 Roanoke Division Director. You may have received emails recently from the candidates. ARRL members will receive ballots in the mail which need to be returned via the USPS and received at ARRL headquarters in Connecticut by November 19th. So once you receive your ballot please fill it out and return it ASAP to ensure it arrives at ARRL headquarters by the deadline.

Main Presentation:

"Digital Voice Hotspots" by Richard Hall (K7RLH).

The evening's presentation was on using VHF/UHF digital voice modes without a repeater. The most common digital voice protocols are System Fusion, D-Star (Digital Smart Technologies for Amateur Radio), and DMR (Digital Mobile Radio), although a couple of other protocols have also been developed. System Fusion is supported by Yaesu, D-Star is supported by Icom and other manufacturers, and DMR which was originally developed by Motorola and is now supported by a variety of manufacturers. The challenge we have in our area is that there are relatively few digital repeaters that are functional. This is where digital hotspots come in. With a digital hotspot and an internet connection, anyone can use the digital voice modes and talk all across the country and around the world. The hotspot serves as a micro digital repeater. Hotspots can be connected to your internet router at home or, if operating mobile, be connected to your cell phone via its own wi-fi hotspot mode. Digital capable Handy Talkies are typically used because your micro repeater hotspot is nearby. Setting your HT to its lowest power setting is advisable because the intent is to broadcast to your nearby hotspot rather than the surrounding neighborhood. The best part is that the equipment to use digital voice modes can be relatively affordable and the Technician license privileges are all that's needed. So everyone with a license can enjoy this fascinating facet of ham radio.

Richard shared the hotspot he uses which is made by TGIFSpot (www.tgifspot.com). TGIFSpot currently makes three models: the entry level TGIF Junior Spot, the mid-grade TGIFSpot 2.4 Nextion, and the flag ship TGIFSPOT 3.5 Nextion. Each has a screen, which not all hotspots have, that allows the users of the 2.4 Nextion and 3.5 Nextion to configure the hotspot without a PC. All three models support the five digital amateur modes DMR, D-Star, P25, NXDN and System Fusion. Richard's model is the TGIFSpot 2.4 Nextion with a 2.4 inch screen which he retrofitted with a small external battery pack so he can operate mobile/portable or in any room of the house. Since TGIF hotspots draw very little power external battery packs can last a long time. Richard reports that TGIFSpot has excellent customer service, and the prices are competitive with other hotspot manufacturers. Federico noted that hams new to the digital voice modes may want to start off with HTs compatible with D-Star or System Fusion. Both are very good protocols and much simpler to use than DMR. DMR was not originally designed for ham radio and requires a code plug. Code plugs are files which include all of your radio's settings, talk groups, contacts, and repeater information. So, configuring DMR radios are a bit more involved, but still worth the effort as DMR is a popular digital voice mode in the United States. Attendees experienced in using digital voice modes shared their

knowledge of hotspots and others had an opportunity to ask a lot of questions. Thanks to Richard for leading an excellent discussion on digital hotspots! I now want to go out and buy one for myself.

Richard concluded the meeting at 8:06 pm.

73

Andy McDaniel – KN4JJU - Secretary

MEMBERSHIP

Just a reminder that it is that time again to pay membership dues.

\$30 for individuals and \$5 for each family member.

You can bring a check or cash to the next meeting or mail them to the club PO box and Christy will let me know she has received them so I can update the list. If you mail them, give me a heads up so I can mark it as pending on the roster.

Makes checks payable to South Wake ARC.

If you are going to mail it, send it to South Wake ARC – PO Box 1565 – Fuquay Varina, NC 27526

I will be developing an online form so new members can fill out the application online and mail or bring a check to a meeting.

I will be reaching out to all members here soon to make sure I have the latest contact information, addresses, etc so I can make sure the membership list reflects current information.

Thanks,

Gary Plante

KO4LQX

NET REPORT

SWARC Group-September 2021

We had three individuals who can be referred to as net check in champs; they are Bill, KK4QDZ, Al, WA3JJG, and Richard, K7RLH.

Look at those counts! Notice that we are only showing folks who have checked in more than once? Why did we do that?! Because there were 30 recorded check-ins that came just once.

See you on the net.

net date	Callsign count	Expr1000	NetCheckins
9/3/2021	14	KK4QDZ	18
9/4/2021	19	WA3JJG	17
9/5/2021	13	K7RLH	17
9/6/2021	9	WB4UFO	14
9/7/2021	18	WA4TCJ	13
9/11/2021	12	KM4IJK	13
9/12/2021	17	KO4LQX	12
9/13/2021	17	KO4SAV	12
9/18/2021	15	KD7AAG	8
9/19/2021	13	KJ4CVK	8
9/20/2021	15	KJ4QNW	8
9/22/2021	14	N4MRW	8
9/25/2021	22	KO4FUD	7
9/26/2021	16	N4BAJ	7
9/27/2021	14	N4NCK	7
9/28/2021	18	WA3JJG	6

9/29/2021	16	KB4NC	6
9/30/2021	15	KO4MSN	5
		KI4WAI	5
		KT4JR	5
		KA0GMY	4
		KM4ARS	4
		KK4BK	4
		KI4RAN	4
		KG4OST	4
		KE4RUN	3
		KI4YII	3
		KG4JOK	3
KM4TC	2	KN4PTL	3
N4AED	2	KD2DMK	3
W1JCA	2	KJ4WLG	2
N4SMB	2	KN4JJU	2
N4BNC	2	K4WCA	2
KN4HDH	2	KM4JLA	2

While we are on the topic of nets, here is the plan for Net Controls while Kenny is recuperating from his first (and soon to be second) surgery.

- ALL noontime nets are cancelled for the foreseeable future--spread the word
- Saturday and Sunday evenings will be called by KT4JR & K7RLH
- KB4NC will call Monday evenings
- KA0GMY will call Tuesday evenings (backup is K7RLH)
- KK4BK will call Wednesday evenings for the time being
- KJ4CVK to pick up Thursday evenings if available (KO4LZZ has volunteered to call if Kenny is not available)

- Fridays will continue to be called by NC4MP
- And we need backups – JUST BECAUSE.

Please contact Richard Hall, K7RLH, if you are interested in calling one or more nets.

Public Service

Check the RARS web site often for Public Service opportunities.

BOARD OF DIRECTORS

President

Richard Hall--K7RLH

Vice President

Manny Garcia--KB4NC

Secretary

Andy McDaniel – KN4JJU

Treasurer

Christy Fernandini - KJ4AEO

Member-At-Large

Al Crawford – WA4TCJ

Member-At-Large

Bernie Jones – N4BAJ

Member-At-Large

Mike Gaither –

K4MWG

Member-At-Large

Brian Knox--KK4BK

Membership Chair

Gary Plante--KO4LQX

Appointed Positions

NET MANAGER

Kenny Souther-KJ4CVK

Special Events Director

Gino Fernandini –KI4YXO

Public Service Director

David Krum – NW3U

SWARC Mission Statement

South Wake ARC's primary purpose is to further the Amateur Radio Service through programs, activities, and education, in order to promote the radio knowledge, fraternalism and individual operating efficiency of its members. Further, it shall be our purpose to support the welfare of our community through public service including radio communications for emergency situations and public events, and through providing information, training, and assistance to individuals or organizations with an interest in the Amateur Radio Service.

LINKS (if you have other links you want added then send them to me)

PRN

A Wide Area Digital Amateur Radio Network

www.ncprn.net

GigaParts

www.gigaparts.com

QRZ

www.qrz.com

Ham Radio Outlet HRO

www.hamradio.com

Raleigh Amateur Radio Society RARS

www.rars.org

Johnson Amateur Radio Society JARS

www.jars..net

South Wake Amateur Radio Club SWARC

www.southwakearc.com

ATTENTION

Our club is like other clubs, we have a mixture of memberships. We have everything from young pre-teen members to those who are “Advanced Teens”. The point is - make sure to check up on our older members occasionally to see if they could use any help. Someday you may be in their exact situation. Also, when you are advised by email or net contact that someone has a need or illness/loss/etc., reach out to them and give them encouragement and help with their needs if you can.

WHO HAVE YOU HELPED THIS MONTH?

ARRL News

ARDC Grant to Benefit High School Computer Science Students

Amateur Radio Digital Communications ([ARDC](#)) is helping computer science students at California High School in San Ramon, California, to become makers by providing a grant to purchase Raspberry Pi computers and Arduino microcontrollers. Computer science AP teacher Sean Raser said he believes that a hands-on approach is the most effective way for students to learn and retain knowledge. The class would aim to accomplish this through encouraging students to invent their own systems using the Raspberry Pis and Arduinos. By combining these devices with sensors, motors,



other electronics, and computer code, students would have the opportunity to learn complex technical concepts first hand.

Raser's challenge has been acquiring enough hardware for all students in his class. With limited resources, his program has been limited to a small number of students, however.

A \$9,950 ARDC grant hopes to change that by allowing Raser to give all of his students the opportunity to participate. The funds will allow him to provide students with Raspberry Pi and micro:bit computers, Arduinos, and the other components.

Raser plans to transform part of his classroom into a makerspace that is accessible to all students at California High School, located in San Ramon.

"The results have been extraordinary. The students' creativity and passion for learning truly thrive as a result of being able to bring their own ideas to life," Raser said. One student, for example, is using a



California High School in San Ramon, California. [California High School photo]

Raspberry Pi Zero and a variety of sensors to record flight data during a model rocket launch. Another has built an automated attendance taker using a Raspberry Pi and RFID sensors. Raser's hope is that these experiences will nudge these students into careers as engineers and scientists.

ARDC is a California-based foundation with roots in amateur radio and internet technology. In 2019, ARDC announced the sale of some 4 million consecutive unused [AMPRNet](#) internet addresses, with the proceeds to establish a program of grants and scholarships in support of communications and networking research with a strong emphasis on amateur radio. ARDC, which manages AMPRNet, said it planned to provide monetary grants to organizations, groups, projects, and scholarships that have significant potential to advance the state of the art of amateur radio and of digital communications.

September 2021 Volunteer Monitor Program Report

The Volunteer Monitor (VM) Program is a joint initiative between the ARRL and FCC to enhance compliance in the Amateur Radio Service. This is the VM Program report for September 2021.

- Technician-class operators in Mansfield, Ohio; Avon Park, Florida, and Pulaski, Tennessee,

received *Advisory Notices* after making numerous FT8 contacts on 20 meters. Technician-class licensees do not have operating privileges on 20 meters.

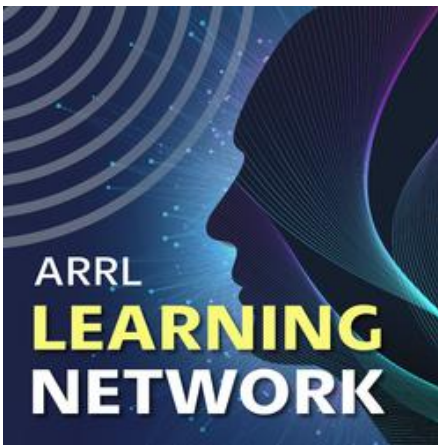
- A Volunteer Monitor in Mission Viejo, California, received a Department of Homeland Security, United States Coast Guard *Certificate of Appreciation* for his efforts in locating a defective transmitter on Marine Radio Channel 16 that was blocking emergency communications on that channel.



- A former licensee in Durham, North Carolina, received an *Advisory Notice* for operating under a call sign and license cancelled by the FCC.
- An operator in White Pine, Tennessee, received an *Advisory Notice* regarding operation on 7.137 MHz, a frequency not authorized under his General-class license.
- Operators in Swannanoa, North Carolina, and New Albany, Indiana, received *Good Operator Notices* for exemplary operation during 2021 and for regularly assisting other operators with transmitter adjustments and amateur radio procedures.
- The VM Program made one recommendation to the FCC for case closure.

VM Program statistics for August showed 2,008 hours on HF frequencies and 2,642 hours on VHF frequencies and above, for a total of 4,650 hours. -- *Thanks to Riley Hollingsworth, K4ZDH, Administrator, Volunteer Monitor Program*

ARRL Learning Network Webinars



Visit the [ARRL Learning Network](#) (a members-only benefit) to register, check on upcoming webinars, and to view previously recorded sessions.

Using the Raspberry Pi with Ham Radio / Presented by Jason Oleham, KM4ACK, Tuesday, October 19, 2021 @ 1:00 pm EDT (1700 UTC)

Computers have become an important part of amateur radio. The Raspberry Pi is a low-cost yet powerful computer that can be used for many amateur radio tasks. Jason Oleham, KM4ACK, an avid YouTube content creator, discusses how to use the Pi, why he started using it, and why he developed

Build-a-Pi, a script that gets hams up and running quickly.

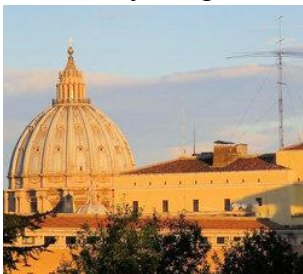
ARRL members may register for upcoming presentations and view previously recorded [Learning Network](#) webinars. ARRL-affiliated radio clubs may also use the recordings as presentations for club meetings, mentoring new and current hams, and discussing amateur radio topics.

The ARRL Learning Network schedule is subject to change.

Announcements



- [NEAR-Fest XXX](#) begins at 9 AM EDT on Friday, October 15, as a hybrid event. The live activity takes place at the Deerfield Fairgrounds in New Hampshire. A Town Meeting will feature the candidates for ARRL New England Division Director. NEAR-Fest continues through Saturday, October 16. Thanks to Mike, W1RC, and the New England Amateur Radio Festival, Inc.
- The government of South Georgia and the South Sandwich Islands has proposed to delegate the administration of amateur radio licenses to the Falkland Island regulator and to issue amateur radio call signs with the prefix VP0, rather than VP8, with an initial suffix letter of either an S or G, as appropriate. VP0 is also the prefix of the British Antarctic Territories.
- After more than 2 years of inactivity, Robert, 3B9FR, is again active from Rodrigues Island, an ARRL DXCC entity. He is mainly a CW operator but does occasionally get on SSB and FT8.
- France's youngest ham is 10-year-old Florian Barret, FR4UG, who lives on Reunion Island.



- On October 16, 0800 - 1600 UTC, HV0A in Vatican City (#112 on Club Log's Most-Wanted DXCC list) station will be active OSCAR 100 in CW and SSB. This will mark the first activation of a Vatican station on the OSCAR 100 satellite.
- [ARRL Audio News](#)® is available free each Friday, providing a look at the week's ham radio news happenings. [Contact ARRL Audio News](#) with questions and comments. The webcast is available on the ARRL website as well as on [Blubrry](#) and may be transmitted freely via repeater at no cost.

Just Ahead in Radiosport

- October 16 - 17 -- JARTS WW RTTY Contest
- October 16 - 17 -- 10-10 International Fall Contest (CW),
- October 16 - 17 -- New York QSO Party (CW phone, digital)
- October 16 - 17 -- Worked All Germany Contest (CW, phone)
- October 16 -- Feld Hell Sprint
- October 16 -- Argentina National 7 MHz Contest (phone)

- October 17 -- RSGB RoLo CW
- October 17 -- Asia-Pacific Fall Sprint (CW)
- October 17 -- UBA ON Contest, 2 Meters (CW, phone)
- October 17 - 18 -- Illinois QSO Party (CW, phone, digital)
- October 17 - 18 -- Run for the Bacon QRP Contest (CW)
- **October 18 -- [ARRL School Club Roundup \(CW, phone\)](#)**
- October 18 -- RSGB FT4 Contest Series
- October 20 -- AGCW Semi-Automatic Key Evening (CW)

For more information, visit the [ARRL Contest Calendar](#).

Upcoming Section, State, and Division Conventions

Some conventions and hamfests may have been canceled or postponed due to the coronavirus pandemic. Check the [calendar of canceled events](#) on the ARRL website.

- October 15 - 17 -- [ARRL Pacific Division Convention](#) (Pacificon), San Ramon, California
- November 6 - 7 -- [ARRL Georgia State Convention](#) (Stone Mountain Hamfest), Lawrenceville, Georgia
- November 13 -- [ARRL Wisconsin State Convention](#) (Wisconsin ARES/RACES Conference) -- Online
- November 13 - 14 -- [ARRL Central Division Convention](#) (Fort Wayne Hamfest & Computer Expo), Fort Wayne, Indiana

Find conventions and hamfests [in your area](#).

Upcoming Contest(<https://www.contestcalendar.com/contestcal.html>)
